



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/636,006	08/07/2003	Scott M. Croce	1328-3	1572
23869	7590	07/16/2004	EXAMINER	
HOFFMANN & BARON, LLP 6900 JERICHO TURNPIKE SYOSSET, NY 11791			SHEEHAN, JOHN P	
			ART UNIT	PAPER NUMBER

1742

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/636,006	<b>Applicant(s)</b> CROCE, SCOTT M.	
	<b>Examiner</b> John P. Sheehan	<b>Art Unit</b> 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 7-22 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>August 7, 2003</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Objections*

1. The claims are objected to in that there are 2 claims numbered as claim 14. Accordingly, misnumbered claims 14 to 21 have been renumbered as 14 to 22 and the dependency has been changed to be consistent with the claim renumbering. These claims will be referred to as presently renumbered.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 8, 13 to 16, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Eccles (PCT Publication No. WO 95/14112).

Eccles teaches a silver alloy for jewelry, flatware, coinage, etc. (page 1, lines 4 to 6) comprising in weight percent:

Silver about 89 to 95%;  
Copper about 0.5 to 6%;  
Zinc about 0.05 to 5%;  
Silicon about 0.02 to 2%;

Boron about 0.001 to 2%;  
Indium about 0.01 to 1.5%;  
Germanium about 0.01 to 2.5%; and  
Tin about 0.25 to 6% (page 4, lines 21 to 30).

Applicants' claims encompass the alloy taught by Eccles.

4. Claims 1, 8, 13 to 16, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bernard et al. (Bernard, US Patent No. 4,973,446 cited in the IDS submitted August 7, 2003).

Bernard teaches a silver alloy for jewelry, flatware, coinage, etc. (page 1, lines 14 to 16 and column 2, lines 46 to 55) comprising in weight percent:

Silver about 89 to 93.5%;  
Copper about 0.5 to 6%;  
Zinc about 0.5 to 5%;  
Silicon about 0.01 to 2%;  
Boron about 0.001 to 2%;  
Indium about 0.01 to 1.5%; and  
Tin about 0.25 to 6% (column 2, lines 7 to 30).

Applicants' claims encompass the alloy taught by Bernard.

5. Claims 1, 8, 14, 15, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasaki et al. (Sasaki, US Patent No. 5,021,214, cited in the IDS submitted August 7, 2003).

Sasaki teaches a specific example alloy that is encompassed by the each of the instant claims (column 2, Table 1, Sample No. 17). In view of Sasaki's Sample No. 17 applicants' claims are considered to be anticipated.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7, 9, 10 to 12 and 17 to 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eccles (PCT Publication No. WO 95/14112).

Eccles teaches a silver alloy for jewelry, flatware, coinage, etc. (page 1, lines 4 to 6) comprising in weight percent:

Silver about 89 to 95%;  
Copper about 0.5 to 6%;  
Zinc about 0.05 to 5%;  
Silicon about 0.02 to 2%;  
Boron about 0.001 to 2%;  
Indium about 0.01 to 1.5%;  
Germanium about 0.01 to 2.5%; and  
Tin about 0.25 to 6% (page 4, lines 21 to 30).

Eccles' silver alloy composition overlaps applicant's claimed silver alloy composition.

Eccles and the claims differ in that Eccles does not teach the exact same proportions as recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the alloy proportions taught by Eccles overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

8. Claims 7, 9 and 17 to 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernard et al. (Bernard, US Patent No. 4,973,446 cited in the IDS submitted August 7, 2003).

Bernard teaches a silver alloy for jewelry, flatware, coinage, etc. (page 1, lines 14 to 16 and column 2, lines 46 to 55) comprising in weight percent:

Silver about 89 to 93.5%;

Copper about 0.5 to 6%;

Zinc about 0.5 to 5%;

Silicon about 0.01 to 2%;

Boron about 0.001 to 2%;

Indium about 0.01 to 1.5%; and

Tin about 0.25 to 6% (column 2, lines 7 to 30).

Bernard's' silver alloy composition overlaps applicant's claimed silver alloy composition.

Bernard and the claims differ in that Bernard does not teach the exact same proportions as recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the alloy proportions taught by Bernard overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934(CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

9. Claims 10 to 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernard et al. (Bernard, US Patent No. 4,973,446 cited in the IDS submitted August 7, 2003).

Bernard teaches a silver alloy for jewelry, flatware, coinage, etc. (page 1, lines 14 to 16 and column 2, lines 46 to 55) comprising in weight percent:

Silver about 89 to 93.5%;

Copper about 0.5 to 6%;

Zinc about 0.5 to 5%;

Silicon about 0.01 to 2%;

Boron about 0.001 to 2%;

Indium about 0.01 to 1.5%; and

Tin about 0.25 to 6% (column 2, lines 7 to 30).

With the exception of the silver content, Bernard's silver alloy composition overlaps applicant's claimed silver alloy composition. Bernard teaches a maximum of 93.5% silver while applicants' claims 10 to 12 recite a silver content of "about 93.8%" (claim 10, line 2).

The claims and Bernard differ in that Bernard does not teach an alloy that overlaps all the proportions of the claimed alloy but with respect to the silver content closely approximates the claimed silver content.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the claimed silver content and the prior art silver content are very similar (i.e., 93.8 and 93.5) and therefore the



range of the prior art establishes *prima facie* obviousness because one of ordinary skill in the art would have expected the similar ranges to have the same properties. See *in re Peterson*, 65 USPQ2d 1379, 1382, citing *Titanium Metals Corp. v. Banner*, 227 USPQ 773, 779 and MPEP 2144.05.

“a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (Court held as proper a rejection of a claim directed to an alloy of “having 0.8%nickel, 0.3% molybdenum, up to 0.1% iron, balance titanium” as obvious over a reference disclosing alloys of 0.75%nickel, 0.25% molybdenum, balance titanium and 0.94%nickel, 0.31% molybdenum, balance titanium.).

Further, in view of applicants’ use of the term “about” in the phrase, “silver is present in an amount of about 93.8% by weight” (claim 10, line 2, emphasis added by the Examiner) used to describe the instantly claimed silver content, the claimed silver content does not distinguish over Bernard’s upper limit of about 93.5% by weight silver.

#### ***Allowable Subject Matter***

10. Claims 2 to 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 2 to 6 none of the references alone or in combination teach or

Art Unit: 1742

suggest a silver alloy comprising at least 85% by weight percent silver and containing each of zinc, copper, indium, tin and iron.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John P. Sheehan  
Primary Examiner  
Art Unit 1742

jps